The background features a close-up of water splashing from a faucet, with a bowl of fresh fruit (raspberries, blackberries, and red grapes) in the lower-left corner. The overall color palette is dominated by blues and greens, with a white and teal graphic design.

# ANNUAL WATER QUALITY REPORT

WATER TESTING  
PERFORMED IN 2015



*Presented By*  
**City of Torrance**

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: CA1910213

## Continuing Our Commitment

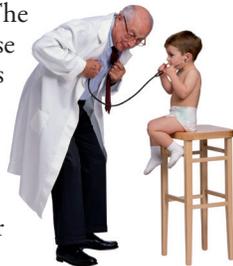
The City of Torrance is pleased to present our annual water quality report. This edition covers all testing completed from January through December 2015. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best-quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users. Included is information about where the water comes from, what is in it, and how it compares with the regulatory standards set by the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board Division of Drinking Water. This report will better inform you about your drinking water and the challenges in delivering a high-quality supply of drinking water to your home.

## Community Participation

The Torrance Water Commission meets the fourth Wednesday of each month beginning at 7:00 p.m. at the West Annex of City Hall, 3031 Torrance Boulevard, Torrance. You are invited to participate in our public forum and voice your concerns about your drinking water.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



## Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include: Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; Pesticides and Herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; Organic Chemical Contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems; Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Andy Darlak, Water Operations Supervisor, at (310) 781-6900.

## Where Does My Water Come From?

The City of Torrance Municipal Water Utility serves approximately 115,000 residents. In 2015, the Municipal Water Utility distributed approximately 20,090 acre-feet of drinking water to its customers, or approximately 5.5 billion gallons. One acre-foot of water is equivalent to 325,900 gallons or an acre of land covered with one foot of water. Torrance purchased 83 percent of the total potable water supply from the Metropolitan Water District of Southern California (MWD), a regional wholesaler of imported surface water. This water originates from two sources: (1) the Colorado River, via the 242-mile Colorado River Aqueduct, and (2) Northern California, via the 441-mile California Water Aqueduct. The Metropolitan Water District performs advanced multi-stage treatment of imported water in five regional treatment plants. The remaining 17 percent of the municipal potable water supply comes from one operating well pumping from the West Coast Ground Water Basin and from a groundwater desalination project.

## Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. (If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/lead](http://www.epa.gov/lead).

## About Our Violation

The City was notified on March 17, 2015, that one sample from our routine sampling location taken on March 16, 2015, was positive for total coliform bacteria but negative for *E. coli*. The City collected the required repeat samples upstream and downstream and at the above-referenced site within 24 hours, and all samples were negative for total coliform bacteria and *E. coli*.

The City also collected two total coliform bacteria samples at the Robert D. Goldsworthy Desalination Treatment Plant effluent but failed to sample the well source feeding the treatment plant, which is required. Both samples also resulted negative for total coliform and *E. coli*. By not sampling the well source, the City was in violation of the Ground Water Monitoring rule. The City has taken corrective action and developed improvements to our Water Quality Monitoring Plan as well as training Water Department staff on Title 22 monitoring and reporting requirements, as well as training our staff in carrying out their duties.

## Source Water Assessment

An assessment of the drinking water source for the city was completed in December 2008. This study was performed in compliance with the California Department of Public Health Source Water Assessment Program, the goal of which is to determine the water system's vulnerability to possible sources of contamination. The assessment determined that our groundwater is most vulnerable to historic gas stations and underground storage tanks. For a copy of the complete assessment, contact the City of Torrance Public Works Department at (310) 781-6900 or visit our Web site at <http://www.torranceca.gov/publicworks/>.

## Conservation ....Make it a Lifetime Commitment

Although California has received substantially more precipitation in recent months, and key watersheds in the northern part of the State are being partially replenished due to improved snow packs, the effects of the drought are still not over. Thanks to the efforts of our customers, the municipal water utility is currently meeting its State-mandated water use reduction target of 20 percent. With your continued commitment, conservation savings will continue to grow. Here's how you can reduce your water use:

- Use a broom rather than hose to clean outdoor areas: Saves 12 gal/min.
- Install a smart control: Saves 25-50 gal/day.
- Water your landscape before 8 a.m. or after 6 p.m.: Saves 25 gal/each watering.
- Use mulch on soil surfaces: Saves 30 gal/1,000 sf.
- Adjust irrigation sprinklers: Saves 15-25 gal/each watering.
- Take 5-minute showers: Saves 15 gal/shower.
- Fix leaky toilets: Saves up to 50 gal/day.
- Wash only full loads of dishes and clothes: Saves 15-45 gal/load.

For additional information and conservation rebates, go to [Bewaterwise.com](http://Bewaterwise.com) and [torranceca.gov/publicworks](http://torranceca.gov/publicworks).

## Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

A constituent is any naturally occurring or man-made substance found in drinking water. The U.S. EPA and the California EPA establish the list of constituents that require testing and the frequency of each test. All sample results are from calendar year 2015 or from the most recent sampling, as the state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality.

### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	City of Torrance Groundwater		MWD Surface Water		Monitored in the Distribution System		VIOLATION	TYPICAL SOURCE
			AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Aluminum (ppm)	1	0.6	ND	NA	0.16	0.09–0.20	NA	NA	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic <sup>1</sup> (ppb)	10	0.004	0.5	ND–2	2.1	2.1–2.1	NA	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	1	2	ND	NA	0.12	0.12–0.12	NA	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	[4.0 (as Cl <sub>2</sub> )]	[4 (as Cl <sub>2</sub> )]	NA	NA	NA	NA	1.4	0.04–2.28	No	Drinking water disinfectant added for treatment
Fecal coliform and <i>E. coli</i> [Total Coliform Rule] (# positive samples)	a routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	(0)	NA	NA	NA	NA	0	NA	No	Human and animal fecal waste
Fluoride <sup>2</sup> (ppm)	2.0	1	0.20	0.18–0.22	0.8	0.6–1.0	0.83	0.64–1.22	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity <sup>3</sup> (pCi/L)	15	(0)	ND	NA	ND	ND–4.0	NA	NA	No	Erosion of natural deposits
Gross Beta Particle Activity <sup>4</sup> (pCi/L)	50	(0)	NA	NA	5.0	4.0–6.0	NA	NA	No	Decay of natural and man-made deposits
Haloacetic Acids (HAAs) (ppb)	60	NA	NA	NA	NA	NA	13.2	3.8–18.2	No	By-product of drinking water disinfection
Methyl tert-Butyl Ether [MTBE] <sup>5</sup> (ppb)	13	13	1.5	ND–5.0	ND	NA	NA	NA	No	Leaking from underground gasoline storage tanks; discharge from petroleum and chemical factories
Nitrate [as nitrate] (ppm)	45	45	ND	NA	ND	NA	NA	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radium 226 (pCi/L)	5	0.05	0.09	0.09–0.09	ND	NA	NA	NA	No	Erosion of natural deposits
Radium 228 (pCi/L)	5	0.019	0.05	ND–0.1	ND	NA	NA	NA	No	Erosion of natural deposits

## REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	City of Torrance Groundwater		MWD Surface Water		Monitored in the Distribution System		VIOLATION	TYPICAL SOURCE
			AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
<b>TTHMs [Total Trihalomethanes]</b> (ppb)	80	NA	NA	NA	NA	NA	64.9	17.1–77.8	No	By-product of drinking water disinfection
<b>Total Coliform Bacteria [Total Coliform Rule]</b> (% positive samples)	More than 5.0% of monthly samples are positive	(0)	NA	NA	NA	NA	0.1	0%–0.9%	No	Naturally present in the environment
<b>Turbidity</b> (NTU)	TT	NA	NA	NA	NA	NA	2.23	0.06–2.23	No	Soil runoff
<b>Uranium</b> (pCi/L)	20	0.43	ND	ND–0.1	3	2.0–3.0	NA	NA	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	AL	PHG (MCLG)	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
<b>Lead</b> (ppb)	15	0.2	ND	0/200	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

## SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	SMCL	PHG (MCLG)	City of Torrance Groundwater		MWD Surface Water		Monitored in the Distribution System		VIOLATION	TYPICAL SOURCE
			AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
<b>Aluminum</b> (ppb)	200	NS	ND	NA	156	88–200	NA	NA	No	Erosion of natural deposits; residual from some surface water treatment processes
<b>Chloride</b> (ppm)	500	NS	147	130–180	100	98.8–102	NA	NA	No	Runoff/leaching from natural deposits; seawater influence
<b>Color</b> (Units)	15	NS	4	3.0–5.0	1	1–1	<5	<5–<5	No	Naturally occurring organic materials
<b>Manganese</b> (ppb)	50	NS	25.9	ND–53	ND	NA	NA	NA	No	Leaching from natural deposits
<b>Methyl tert-Butyl Ether [MTBE]<sup>3</sup></b> (ppb)	5	NS	1.5	ND–5.0	NA	NA	NA	NA	No	Leaking underground storage tanks; discharge from petroleum and chemical factories
<b>Odor–Threshold</b> (Units)	3	NS	1	1–1	2	2.0–2.0	ND	NA	No	Naturally occurring organic materials
<b>Specific Conductance</b> (µS/cm)	1,600	NS	1,440	1,100–2,500	1,040	1,030–1,060	NA	NA	No	Substances that form ions when in water; seawater influence
<b>Sulfate</b> (ppm)	500	NS	290.8	59.0–320.0	257	252–261	NA	NA	No	Runoff/leaching from natural deposits; industrial wastes
<b>Total Dissolved Solids</b> (ppm)	1,000	NS	483	300–630	660	654–665	NA	NA	No	Runoff/leaching from natural deposits
<b>Turbidity</b> (Units)	5	NS	ND	NA	ND	NA	NA	NA	No	Soil runoff

## ADDITIONAL CHEMICALS OF INTEREST

SAMPLED IN 2013 - 2015	Groundwater		MWD's Surface Water	
	AVERAGE	RANGE LOW-HIGH	AVERAGE	RANGE LOW-HIGH
Alkalinity (ppm)	156.3	52–210	126	123–129
Calcium (ppm)	108.5	82.9–200.0	78.0	77–78
Magnesium (ppm)	32.6	26.3–55.0	27	26–28
N-Nitrosodimethylamine (ppb)	NA	NA	ND	ND–0.006
pH (standard unit)	7.6	7.4–7.9	8.1	8.1
Potassium (ppm)	9.2	7.4–12.0	4.9	4.8–5.0
Sodium (ppm)	205	80–330	100	92–102
Total Hardness (ppm)	404	319–720	300	296–304

## THIRD UNREGULATED CONTAMINANT MONITORING RULE (UCMR3)

Monitored in 2013 - 2015			
SUBSTANCE (UNIT OF MEASURE)	AVERAGE	RANGE LOW-HIGH	MINIMUM REPORTING LEVEL
Chlorate (ppb)	175.88	ND–920	20 ppb
Hexavalent Chromium (ppb)	0.02	ND–0.06	0.03 ppb
Total Chromium (ppb)	0.01	ND–0.21	0.2 ppb
Molybdenum (ppb)	0.83	ND–4.7	1 ppb
Strontium (ppb)	48.6	ND–1200	0.3 ppb
Vanadium (ppb)	0.5	ND–3.2	0.2 ppb

<sup>1</sup> While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

<sup>2</sup> Our water system treats your water by adding fluoride to the naturally occurring level to help prevent dental caries in consumers. State regulations require the fluoride levels in the treated water be maintained within a range of 0.6-1.2 ppm with an optimum dose of 0.7 ppm. Our monitoring showed that the fluoride levels in the treated water ranged from 0.6–1.22 with an average of 0.815 ppm. Information about fluoridation, oral health, and current issues is available from [http://www.swrcb.ca.gov/drinking\\_water/certic/drinkingwater/Fluoridation.shtml](http://www.swrcb.ca.gov/drinking_water/certic/drinkingwater/Fluoridation.shtml).

<sup>3</sup> Gross alpha particle activity standard also includes the radium 226 standard.

<sup>4</sup> The State Water Resources Control Board considers 50 pCi/L to be the level of concern for beta particles.

<sup>5</sup> MTBE was detected in one well in 2014 after treatment effluent samples were nondetectable.

## Definitions

**AL (Regulatory Action Level):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**µS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA:** Not applicable

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NS:** No standard

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**PDWS (Primary Drinking Water Standard):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**PHG (Public Health Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.